July 9, 2015

Mr. Christopher Bonsignore, P.E.
Principal Engineer
Environmental Compliance Section
Bureau of Engineering and Highway Operations
State of Connecticut Department of Transportation
2800 Berlin Turnpike, P.O. Box 317546
Newington, CT 06131-7546

Attention: Judith Nemecek, P.E. / Robert Reilly

Subject: On-Call Asbestos, Lead, Air Quality & Demolition Compliance
Agreement No. 08.24-03(11)
HazMat Inspection - Bridge Nos. 03311, 03312, 03313, 03320 & 03322, Plainville & New Britain, CT
ConnDOT Assignment No. 504-5079
ConnDOT Project No. 109-172
TRC Project No. 183572.5089.00710

Dear Mr. Bonsignore:

TRC performed a limited survey for hazardous building materials associated with the planned rehabilitations of Bridge Nos. 03311, 03312, 03313, 03320 & 03322 in Plainville and New Britain, Connecticut. Results of the survey identified lead paint to be present on the structural steel/metal bridge components of Bridge Nos. 03311, 03312 & 03313. Results obtained from TCLP waste stream sampling and analysis for leachable lead on the structural steel and metal bridge surfaces, characterized the paint waste stream at Bridge Nos. 03311, 03312 & 03313 as EPA RCRA/CTDEEP hazardous waste. The structural steel components of Bridge No. 03320 were not safely accessible for testing and therefore, lead paint is presumed present on the painted surfaces of the structural steel/metal bridge components on the bridge and any painted non-metallic debris and/or paint waste to be generated from the painted surfaces of the structural steel/metal bridge components is presumed as RCRA/CT DEEP hazardous waste. No detectable amounts of lead paint were identified on the structural steel/metal bridge components of Bridge No. 03322, therefore any painted non-metallic debris and/or paint waste is characterized as non-hazardous non-RCRA waste. Suspect asbestos containing material in the form of joint caulk was sampled at Bridge No. 03311 and found to be non-ACM. Suspect asbestos containing materials in the form of joint caulk and cloth vibration dampeners under the bearings were sampled at Bridge No. 03313 and found to be non-ACM. Suspect asbestos containing materials in the form of skim coat and tar on walls were sampled at Bridge No. 03322 and found to be non-ACM. No bird/pigeon guano accumulations were identified in accessible areas of the bridges. Associated laboratory data is attached.

If you have any questions, please call TRC at (860) 298-9692.

Very Truly Yours,

TRC

Erik R. Plimpton, P.E., CHMM
Program Manager

E. Burke, P.E.
Engineer in Charge

Lead Based Paint Measurement Summary Table

Device(s):	**Niton XLP301-A (Serial #25555) X Ray Fluorescence (XRF) Spectrum Analyzer**
Site:	**CT DOT - Bridge Nos. 03311, 03312, 03313 & 03322, Plainville & New Britain CT**
Project # :	**183572.5089.0710**
Date(s):	**4/20/2015**
Inspector:	**Bryce Aston (CT License No. 001838)**

Number	Interior/ Exterior	Location	Bridge #	Structure	Feature	Material	Color	Condition	Reading (mg/cm2)	Precision (mg/cm2)	Depth Index	Duration (sec)	Date/Time
1			**Self Calibration**									52.2	4/20/2015 8:59
2			**0.0 Calibration**						0.0	0.0	1.0	9.4	4/20/2015 9:04
3			**1.5 Calibration**						1.6	0.1	1.2	23.7	4/20/2015 9:05
4			**0.7 Calibration**						0.6	0.1	1.0	23.2	4/20/2015 9:05
5	Exterior	Plainville	Bridge 03311	Girder		Metal	Grey	Defective	**18.8**	**1.0**	2.4	20.0	4/20/2015 9:08
6	Exterior	Plainville	Bridge 03311	Girder		Metal	Grey	Defective	**15.6**	**1.2**	1.9	13.3	4/20/2015 9:09
7	Exterior	Plainville	Bridge 03311	Girder		Metal	Grey	Defective	**12.2**	**1.2**	1.9	10.5	4/20/2015 9:09
8	Exterior	Plainville	Bridge 03311	Crossbeam		Metal	Grey	Defective	**14.4**	**1.0**	7.8	16.4	4/20/2015 9:10
9	Exterior	Plainville	Bridge 03311	Crossbeam		Metal	Grey	Defective	**12.9**	**1.3**	8.8	9.4	4/20/2015 9:11
10	Exterior	Plainville	Bridge 03311	Crossbeam		Metal	Grey	Defective	**22.3**	**1.5**	10.0	12.1	4/20/2015 9:11
11	Exterior	Plainville	Bridge 03311	Rocker pad		Metal	Grey	Defective	0.0	0.0	1.0	9.5	4/20/2015 9:12
12	Exterior	Plainville	Bridge 03311	Rocker pad		Metal	Grey	Defective	0.0	0.0	1.0	5.3	4/20/2015 9:12
13	Exterior	Plainville	Bridge 03311	Rocker pad		Metal	Grey	Defective	0.0	0.0	1.0	6.3	4/20/2015 9:13
14					**VOID**								
15	Exterior	Plainville	Bridge 03311	Rocker pad		Metal	Grey	Defective	0.0	0.0	1.0	9.0	4/20/2015 9:15
16	Exterior	Plainville	Bridge 03312	Girder		Metal	Grey	Defective	**14.7**	**1.1**	8.4	15.2	4/20/2015 9:38
17	Exterior	Plainville	Bridge 03312	Girder		Metal	Grey	Defective	**18.0**	**1.1**	8.9	16.4	4/20/2015 9:38
18	Exterior	Plainville	Bridge 03312	Girder		Metal	Grey	Defective	**11.1**	**1.1**	10.0	12.1	4/20/2015 9:39
19	Exterior	Plainville	Bridge 03312	Crossbeam		Metal	Grey	Defective	**14.5**	**1.4**	6.3	10.0	4/20/2015 9:39
20	Exterior	Plainville	Bridge 03312	Crossbeam		Metal	Grey	Defective	**20.1**	**1.4**	10.0	12.1	4/20/2015 9:40
21	Exterior	Plainville	Bridge 03312	Crossbeam		Metal	Grey	Defective	**20.9**	**1.4**	10.0	12.6	4/20/2015 9:41
22	Exterior	Plainville	Bridge 03312	Rocker pad		Metal	Grey	Defective	0.0	0.0	1.0	5.8	4/20/2015 9:41
23	Exterior	Plainville	Bridge 03312	Rocker pad		Metal	Grey	Defective	0.0	0.0	1.0	2.6	4/20/2015 9:42
24	Exterior	Plainville	Bridge 03312	Rocker pad		Metal	Grey	Defective	0.0	0.0	1.0	6.8	4/20/2015 9:42
25	Exterior	New Britain	Bridge 03313	Girder		Metal	Grey	Defective	**17.5**	**1.3**	2.0	12.7	4/20/2015 10:06
26	Exterior	New Britain	Bridge 03313	Girder		Metal	Grey	Defective	**11.0**	**1.3**	1.8	8.9	4/20/2015 10:06
27	Exterior	New Britain	Bridge 03313	Girder		Metal	Grey	Defective	**6.7**	**0.8**	1.8	15.8	4/20/2015 10:07
28	Exterior	New Britain	Bridge 03313	Crossbeam		Metal	Grey	Defective	**17.7**	**1.5**	8.7	9.5	4/20/2015 10:07
29	Exterior	New Britain	Bridge 03313	Crossbeam		Metal	Grey	Defective	**0.8**	**0.2**	10.0	30.0	4/20/2015 10:08
30	Exterior	New Britain	Bridge 03313	Crossbeam		Metal	Grey	Defective	**16.2**	**1.5**	7.0	8.9	4/20/2015 10:09
31	Exterior	New Britain	Bridge 03313	Crossbeam		Metal	Grey	Defective	**11.5**	**3.6**	10.0	3.2	4/20/2015 10:09
32	Exterior	New Britain	Bridge 03313	Rocker pad		Metal	Grey	Defective	0.0	0.0	3.6	8.9	4/20/2015 10:09
33	Exterior	New Britain	Bridge 03313	Rocker pad		Metal	Grey	Defective	0.0	0.0	1.0	8.9	4/20/2015 10:10
34	Exterior	New Britain	Bridge 03313	Rocker pad		Metal	Grey	Defective	0.0	0.0	1.8	8.9	4/20/2015 10:11
35	Exterior	New Britain	Bridge 03322	Girder		Metal	Grey	Defective	0.0	0.0	2.4	13.7	4/20/2015 11:48
36	Exterior	New Britain	Bridge 03322	Girder		Metal	Grey	Defective	0.0	0.0	1.0	11.6	4/20/2015 11:48
37	Exterior	New Britain	Bridge 03322	Girder		Metal	Grey	Defective	0.0	0.0	1.0	11.6	4/20/2015 11:49

Lead paint includes paint found to contain **any detectable** amount of lead
by Atomic Absorption Spectrophotometry (AAS) or X-Ray Fluorescence (XRF).

Lead Based Paint Measurement Summary Table

Device(s):	**Niton XLP301-A (Serial #25555) X Ray Fluorescence (XRF) Spectrum Analyzer**
Site:	**CT DOT - Bridge Nos. 03311, 03312, 03313 & 03322, Plainville & New Britain CT**
Project # :	**183572.5089.0710**
Date(s):	**4/20/2015**
Inspector:	**Bryce Aston (CT License No. 001838)**

Number	Interior/ Exterior	Location	Bridge #	Structure	Feature	Material	Color	Condition	Reading (mg/cm2)	Precision (mg/cm2)	Depth Index	Duration (sec)	Date/Time
38	Exterior	New Britain	Bridge 03322	Crossbeam		Metal	Grey	Defective	0.0	0.0	1.0	8.4	4/20/2015 11:50
39	Exterior	New Britain	Bridge 03322	Crossbeam		Metal	Grey	Defective	0.0	0.0	1.0	10.5	4/20/2015 11:50
40	Exterior	New Britain	Bridge 03322	Rocker pad		Metal	Grey	Defective	0.0	0.0	2.1	21.0	4/20/2015 11:51
41					VOID								
42					VOID								
43	Exterior	New Britain	Bridge 03322	Rocker pad		Metal	Grey	Defective	0.0	0.0	3.3	21.5	4/20/2015 11:53
44			**0.0 Calibration**						0.0	0.0	1.0	5.2	4/20/2015 12:40
45			**1.5 Calibration**						1.6	0.1	1.2	11.1	4/20/2015 12:40
46			**0.7 Calibration**						0.7	0.1	1.1	11.0	4/20/2015 12:40

Lead paint includes paint found to contain **any detectable** amount of lead
by Atomic Absorption Spectrophotometry (AAS) or X-Ray Fluorescence (XRF).

80 Lupes Drive
Stratford, CT 06615

COMPLETE ENVIRONMENTAL TESTING, INC.

Tel: (203) 377-9984
Fax: (203) 377-9952
e-mail: cetl@cetlabs.com

Client: Mr. Stephen Arienti
TRC Environmental Consultants
21 Griffin Rd., North
Windsor, CT 06095

Analytical Report

CET# 5040543

Report Date:April 24, 2015
Project: Bridge TCLPs, 3311,3312,3313,3322
Project Number: 183572-5079-00740

Connecticut Laboratory Certificate: PH 0116
Massachussetts laboratory Certificate: M-CT903

NELAP ACCREDITED ELAP LABORATORY

New York Certification: 11982
Rhode Island Certification: 199

SAMPLE SUMMARY

The sample(s) were received at 18.3°C.

This report contains analytical data associated with following samples only.

Sample ID	Laboratory ID	Matrix	Collection Date/Time	Receipt Date
1 Bridge 3311	5040543-01	Solid	4/20/2015 9:50	04/22/2015
2 Bridge 3312	5040543-02	Solid	4/20/2015 10:50	04/22/2015
3 Bridge 3313	5040543-03	Solid	4/20/2015 11:30	04/22/2015
4 Bridge 3322	5040543-04	Paint Chip	4/20/2015 14:30	04/22/2015

Analyte: Total Lead [EPA 6010C] **Analyst: SS**

Prep: EPA 3050B **Matrix: Paint Chip**

Laboratory ID	Client Sample ID	Result	RL	Units	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
5040543-04	4 Bridge 3322	ND	0.10	%	1	B5D2406	04/24/2015	04/24/2015 14:24	

Analyte: TCLP Lead [EPA 6010C] **Analyst: SS**

Prep: EPA 3005A-1311 **Matrix: Extract**

Laboratory ID	Client Sample ID	Result	RL	Units	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
5040543-01	1 Bridge 3311	**210**	0.013	mg/L	1	B5D2424	04/24/2015	04/24/2015 15:49	
5040543-02	2 Bridge 3312	**140**	0.013	mg/L	1	B5D2424	04/24/2015	04/24/2015 15:53	
5040543-03	3 Bridge 3313	**690**	0.013	mg/L	1	B5D2424	04/24/2015	04/24/2015 15:58	

CET # : 5040543
Project: Bridge TCLPs, 3311,3312,3313,3322
Project Number: 183572-5079-00740

Questions related to this report should be directed to David Ditta, Timothy Fusco, or Robert Blake at 203-377-9984.

Sincerely,

David Ditta
Laboratory Director

Report Comments:

Sample Result Flags:
E- The result is estimated, above the calibration range.
H- The surrogate recovery is above the control limits.
L- The surrogate recovery is below the control limits.
B- The compound was detected in the laboratory blank.
P- The Relative Percent Difference (RPD) of dual column analyses exceeds 40%.
D- The RPD between the sample and the sample duplicate is high. Sample Homogenity may be a problem.
+- The Surrogate was diluted out.
*C1- The Continuing Calibration did not meet method specifications and was biased low for this analyte. Increased uncertainty is associated with the reported value which is likely to be biased low.
*C2- The Continuing Calibration did not meet method specifications and was biased high for this analyte. Increased uncertainty is associated with the reported value which is likely to be biased high.
*F1- The Laboratory Control Sample recovery is outside of control limits. Reported value for this analyte is likely to be biased on the low side.
*F2- The Laboratory Control Sample recovery is outside of control limits. Reported value for this analyte is likely to be biased on the high side.
I- The Analyte exceeds %RSD limits for the Initial Calibration. This is a non-directional bias.

All results met standard operating procedures unless indicated by a data qualifier next to a sample result, or a narration in the QC report.

Complete Environmental Testing is only responsible for the certified testing and is not directly responsible for the integrity of the sample before laboratory receipt.

ND is None Detected at the specified detection limit
All analyses were performed in house unless a Reference Laboratory is listed.
Samples will be disposed of 30 days after the report date.

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA 6010C in Soil	
Lead	CT,NY
EPA 6010C in Solid	
Lead	CT

Complete Environmental Testing operates under the following certifications and accreditations:

Code	Description	Number	Expires
CT	Connecticut Public Health	PH0116	09/30/2016
NY	New York Certification (NELAC)	11982	04/01/2015

5040543

TRC

21 GRIFFIN ROAD NORTH
WINDSOR, CONNECTICUT 06095
TELEPHONE (860) 298-9692
FAX (860) 298-6380

Edition: November 2013
Supersede Previous Edition

TCLP CHAIN OF CUSTODY

LAB ID #.

PROJECT NUMBER	PROJECT NAME	PARAMETERS	TURNAROUND TIME
183572-5079-00740	Bridge TCLPS #3311, 3312, 3313, 3322		24hr [X] 48hr [ ] 3day [ ] 5day 24hr [ ] 48hr [ ] 3day [ ] 5day

INSPECTOR: (SIGNATURE) Bryce Aston

(PRINTED) Bryce Aston

FIELD SAMPLE NUMBER	DATE	TIME	TYPE COMP	TYPE GRAB	SAMPLE LOCATION	RCRA Pb	RCRA Pb, AS, CR, CD	8 RCRA Metals	TCLP Pb	SPLP Pb	Total Pb	MATERIAL
1	4/20/15	950			Bridge # 3311				X			TCLP paint sample chips
2	4/20/15	1050			Bridge # 3312				X			TCLP paint sample chips
3	4/20/15	1130			Bridge # 3313				X			TCLP paint sample chips
[redacted]	[redacted]	[redacted]			[redacted]				[redacted]			[redacted]
4	4/20/15	1430			Bridge # 3322						X	Paint chip sample

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature)
	4/21/15	18.3°N 1432 4/20/15			
(Printed) Bryce Aston	Time:	(Printed)	(Printed)	Time:	(Printed)

Results to. Steve Arienti SArienti@Trcsolutions.com

Industrial Hygiene Laboratory
21 Griffin Road North
Windsor, CT 06095
(860) 298-6308

TRC
Results you can rely on

BULK ASBESTOS ANALYSIS REPORT

CLIENT: CT Department of Transportation

Lab Log #:	0045725
Project #:	183572.5079.0740
Date Received:	04/21/2015
Date Analyzed:	04/21/2015

Site: Bridges #3311, 3313 & 3322

POLARIZED LIGHT MICROSCOPY by EPA 600/R-93/116

Sample No.	Color	Homogenous	Multi-Layered	Layer No.	Other Matrix Materials	Asbestos %	Asbestos Type
1	Grey	Yes	No	- -	- - -	ND	None
2	Grey	Yes	No	- -	- - -	ND	None
3	Black	Yes	No	- -	- - -	ND	None
4	Black	Yes	No	- -	- - -	ND	None
5	Grey	Yes	No	- -	- - -	ND	None
6	Grey	Yes	No	- -	- - -	ND	None
7	Grey	Yes	No	- -	- - -	Trace	Chrysotile
8	Grey	Yes	No	- -	- - -	Trace	Chrysotile
9	Black	Yes	No	- -	- - -	ND	None
10	Black	Yes	No	- -	- - -	ND	None

Industrial Hygiene Laboratory
21 Griffin Road North
Windsor, CT 06095
(860) 298-6308

TRC
Results you can rely on

POLARIZED LIGHT MICROSCOPY by EPA 600/R-93/116

Sample No.	Color	Homogenous	Multi-Layered	Layer No.	Other Matrix Materials	Asbestos %	Asbestos Type

Reporting limit- asbestos present at 1%
ND - asbestos was not detected
Trace - asbestos was observed at level of less than 1%
NA/PS - Not Analyzed / Positive Stop
SNA- Sample Not Analyzed- See Chain of Custody for details

Note: Polarized-light microscopy is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound materials. In those cases, negative results must be confirmed by quantitative transmission electron microscopy.

The Laboratory at TRC follows the EPA's Interim Method for the Determination of Asbestos in Bulk Insulation (1982), and the EPA recommended Method for the Determination of Asbestos in Bulk Building Materials (EPA/600/R-93/116), July 1993, R.L. Perkins and B.W. Harvey which utilizes polarized light microscopy (PLM). Our analysts have completed an accredited course in asbestos identification. TRC's Laboratory is accredited under the National Voluntary Laboratory Accreditation Program (NVLAP), for Bulk Asbestos Fiber Analysis, NVLAP Code 18/A01, effective through June 30, 2015. TRC is an American Industrial Hygiene Association (AIHA) accredited lab for PLM effective through October 1, 2016. Asbestos content is determined by visual estimate unless otherwise indicated. Quality Control is performed in-house on at least 10% of samples and the QC data related to the samples is available upon written request from the client.

Analyzed by: K. Williamson — Kathleen Williamson, Laboratory Manager

Reviewed by: Amanda Parkins — Amanda Parkins, Approved Signatory

Date Issued
04/21/2015

TRC

Edition: October 2009
Supersede Previous Edition

21 GRIFFIN ROAD NORTH
WINDSOR, CONNECTICUT 06095
TELEPHONE (860) 298-9692
FAX (860) 298-6380

ASBESTOS BULK SAMPLING
CHAIN OF CUSTODY

LAB ID #. 45725

PROJECT NUMBER	PROJECT NAME	PARAMETERS	TURNAROUND TIME
183578-5079-00740	Bridges #3311, 3313, 3322		PLM: 8hr X 24hr 48hr 3day TEM: 24hr X 48hr 3day 5day

SIGNATURE	INSPECTOR
Bryce Aston	Bryce Aston

FIELD SAMPLE NUMBER	DATE	TIME	TYPE COMP	TYPE GRAB	SAMPLE LOCATION	PLM EPA 600/R93/116 (POSITIVE STOP)	PLM EPA 600/R93/116 (w/ gravimetric reduction) (POSITIVE STOP)	ANALYZE BY LAYER	POINT COUNT (IF >1% & <10%)	TEM NY NOB 198.4 (IF PLM SERIES NEG)	MATERIAL
1	4/20/15	1000			Bridge #3311 Top side Abutment	X				X	Joint caulk (C1)
2		1000			" " Joint caulk	X					" "
3		1130			Bridge #3313 Pad	X				X	Pad sample (P1)
4		1130			" " Pad	X					" " (P1)
5		1140			" " Top side of Abutment	X				X	Joint caulk (C2)
6		1140			" " Joint caulk	X					" " (C2)
7		1405			Bridge #3322 Skim coat	X				X	Skim coat on wall (SC1)
8		1410			" " " wall	X					" " (SC1)
9		1400			Bridge #3322 wall tan	X				X	Tan on wall (T1)
10		1402			" " "	X					" " (T1)

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature)
	4/21/15	4/21/15			
(Printed) Bryce Aston	Time:	(Printed) 1000	(Printed)	Time:	(Printed)

Remarks: Results to Steve Arienti

Condition of Samples:
Acceptable: Yes ✓ No
Comments:

ProScience Analytical Services, Inc

Erik Plimpton
TRC Environmental Corp. (CT)
21 Griffin Road North
Windsor, CT 06095

April 24, 2015

Dear Erik Plimpton,

Results of samples you described and submitted to ProScience Analytical Services, Inc. are shown on the enclosed data sheets. The analytical results in this report apply to the items tested only.
The listed samples were prepared and analyzed in compliance with the New York State Transmission Electron Microscope Method for Identifying and Quantitating Asbestos in Non-Friable Organically Bound Bulk Samples. This method is used for the determination of weight percent of asbestos in non-friable materials.
The sample is processed to remove non-asbestos interference. The remaining residue is examined using a Philips 300 transmission electron microscope equipped with selected area electron diffraction (SAED) and an Evex energy dispersive x-ray analyzer.

The following are reported: identification numbers, type of material, color or the sample, initial weight of the sample, weight percent of organic material lost by ashing, weight percent of carbonates lost by acid dissolution, weight percent of non-fibrous/non asbestos inorganic material, total weight percent of asbestos in the original sample, and the type(s) of asbestos, if any.
The EPA recognizes asbestos as the following: actinolite, amosite, anthophyllite, chrysotile, crocidolite, and tremolite. To be considered asbestos containing, a material must be determined to contain greater than one percent asbestos. Samples are retained for a period of 2 months.

The quality control data related to the samples analyzed are available for review upon the written request of the client. ProScience Analytical Services, Inc. and its personnel assume no responsibility for potential sample contamination, misuse, misinformation, or misrepresentation by the client. The enclosed results may not be used under any circumstances as product endorsement by any US government agency including NIST/NVLAP.

Please contact me if you have any questions regarding this report or related information.

Sincerely,

Mark Derosier, Senior Analyst
Aimee Cormier, Laboratory Manager

Enclosure:

BATCH NUMBER : NT 15126 CLIENT PROJECT ID: 183572.5079.0740
Client Ref: CT DOT - Bridges #3311, 3313 & 3322
NVLAP Lab Code 200090-0; CT ID# PH-0209; MA ID# AA000156; ME ID# LB-055; ME ID# LA-056; AIHA ID# 102754; VT ID# AL016876; PH ID# 218(TEM,PLM); RI ID# 186.

ProScience Analytical Services, Inc.

22 Cummings Park, Woburn, Massachusetts 01801
781-935-3212 ~ Fax: 781-932-4857 ~ E-Mail general@proscience.net

Laboratory Report

Client Project #: 183572.5079.0740
Client Reference: CT DOT - Bridges #3311, 3313 & 3322
PO #: C183572
Client #: 297
Client Name: TRC Environmental Corp. (CT)

Batch: **NT 15126**
Method: NOB
Date Received: 4/22/2015
Date Analyzed: 4/24/2015
Date of Report: 4/24/2015

LAB ID	Field ID	Description:	Color	Initial Weight	% Asbestos Types						% Other Non-asb.	% Organic	% Carb.	Total % Asbestos	Analyzed / Charged	Preped / Charged
					CHR	AMO	ACT	CRO	ANT	TRE						
NT115077	1	Joint caulk		1.3409	.00	.00	.00	.00	.00	.00	45.34	35.30	19.36	ND	Yes	No
NT115078	3	Pad sample		.6090	.00	.00	.00	.00	.00	.00	4.82	90.30	4.88	ND	Yes	No
NT115079	5	Joint caulk		.8937	.00	.00	.00	.00	.00	.00	36.86	29.88	33.26	ND	Yes	No
NT115080	7	Skim coat on wall		.2956	.00	.00	.00	.00	.00	.00	30.08	7.81	62.11	ND	Yes	No
NT115081	9	Tar on wall		.5485	.00	.00	.00	.00	.00	.00	1.60	90.01	8.39	ND	Yes	No

Comments:

Key: CHR = Chrysotile AMO = Amosite CRO = Crocidolite ACT = Actinolite TRE = Tremolite ANT = Anthophyllite TR = Trace = < 1% ND = None Detected

Mark Derosier, Analyst

Proscience Analytical Services, Inc.

NT15126

22 Cummings Park, Woburn, MA 01801 Ph. 781-935-3212 Fax 781-932-4857

TEM Bulk Chain of Custody Record

Date: 04/21/15

PO#: **C183572** Analysis Type: Chatfield **EPA N.O.B** Qualitative

Client: TRC

Client Job#: 183572.5079.0740

Client Job Ref./Loc.: CT DOT- Bridges #3311, 3313 & 3322

Relinquished by: K. Williamson – KWilliamson@trcsolutions.com

Received by: Kathy Artone 4/22/15 @ 10:05AM

Report to: E. Plimpton / EPlimpton@trcsolutions.com & EBouley@trcsolutions.com

Samplers Name: B. Aston

Turn Around Time: <12 Hour <24 Hour **<48 Hour** <3 Day 5 Day Other:

				For Lab Use Only	
Client ID #	**Lab ID#**	**Description**	**Location**	**Acceptable on Receipt**	**Comments**
1	45725	Caulk	See COC		
3	45725	Pad			
5	45725	Caulk			
7	45725	Wall Coating			
9	45725	Tar			

For Lab Use Only	# Spies	Total	Client #	Batch #	Results Reported	Comments

NT15126

TRC

Edition: October 2009
Supersede Previous Edition

21 GRIFFIN ROAD NORTH
WINDSOR, CONNECTICUT 06095
TELEPHONE (860) 298-9692
FAX (860) 298-6380

ASBESTOS BULK SAMPLING CHAIN OF CUSTODY

LAB ID #. 45725

PROJECT NUMBER	PROJECT NAME	PARAMETERS	TURNAROUND TIME
183578-5079-00790	Bridges #3311, 3313, 3722		PLM: 8hr (X) 24hr 48hr 3day TEM: 24hr (X) 48hr 3day 5day

SIGNATURE	INSPECTOR
Bryce Aston	Bryce Aston

FIELD SAMPLE NUMBER	DATE	TIME	TYPE COMP	TYPE GRAB	SAMPLE LOCATION	PLM EPA 600/R93/116 (POSITIVE STOP)	PLM EPA 600/R93/116 (w/ gravimetric reduction) (POSITIVE STOP)	ANALYZE BY LAYER	POINT COUNT (IF >1% & <10%)	TEM NY NOB 198.4 (IF PLM SERIES NEG)	MATERIAL
1	4/20/15	1000			Bridge #3311 Top side Abutment	X				X	Joint caulk (C1)
2	↓	1005			↓ ↓ Joint caulk	X					↓ ↓
3	↓	1130			Bridge #3313 Pad	X					Pad sample (P1)
4	↓	1135			↓ ↓ Pad	X					↓ ↓ (P1)
5	↓	1140			↓ ↓ Top side of Abutment	X				X	Joint caulk (C2)
6	↓	1145			↓ ↓ Joint caulk	X					↓ ↓ (C2)
7	↓	1405			Bridge #3722 Skim coat	X					Skim coat on wall (SC1)
8	↓	1410			↓ ↓ ↓ wall	X					↓ ↓ (SC1)
9	↓	1400			Bridge #3722 wall tan	X				X	Tan on wall (T1)
10	↓	1402			↓ ↓ ↓	X					↓ ↓ (T1)

Relinquished by: (Signature)	Date:	Received by: (Signature)	Relinquished by: (Signature)	Date:	Received by: (Signature)
	4/21/15	4/21/15			
(Printed) Bryce Aston	Time:	(Printed) 1000	(Printed)	Time:	(Printed)

Remarks: Results to Steve Arienti

Condition of Samples:
Acceptable: Yes ✓ No
Comments:

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

memorandum

subject: State Bridge Program
Project No. 109-172
Bridge Nos. 03311, 03312, 03313, 03320 and 03322 in Plainville/ New Britain

date: December 3, 2014

to: Mr. Gregory M. Dorosh
Transportation Principal Engineer
Bureau of Engineering and Construction

from: Mr. Timothy D. Fields for
Transportation Principal Engineer
Bureau of Engineering and Construction

Attached for your use in generating a Task 100 is a location map and a brief description of the following bridge rehabilitation project

Project No.	Bridge No.	Location	Town	R.O.W. Impacts
109-172	03311	I-84 WB over Rt. 72 WB, Rt. 372, R.R. and River	Plainville	None
109-172	03312	I-84 EB over Rt. 72, Rt. 372, R.R. and River	Plainville	None
109-172	03313	I-84 TR 815 over I-84 EB, Rt. 72 WB, Rt. 372, R.R. and River	New Britain	None
109-172	03320	I-84 TR 816 over Rt. 372, R.R. and River	New Britain	None
109-172	03322	I-84 Ramps 181 and 184 over I-84 and I-84 Ramp 181	New Britain	None

Please advise us of your determination regarding the screening requirements for hazardous wastes, contaminated materials and regulated substances for this site.

Time associated with this work should be charged to Project No. 109-172(P.E.). If you have any questions regarding this matter, please contact Mr. Louis D. Bacho, at Ext. 3212.

Attachments

Jeffrey J. Fontaine/gh
cc: Theodore H. Nezames – Timothy D. Fields – Louis D. Bacho – Susan Morneault
Thomas M. Ryan – Mark F. Levesque (CJM)

RECEIVED
DEC 05 2014
Division of Environmental Compliance

FROM THE DESK OF
THEODORE NEZAMES
F.Y.I. | PLS DO | PLS SEE ME
DEC 04 2014
J. ANDREWS
J. BERBRICK
R. HALL
J. HANLON
R. MESSINA
J. WATTS/YZYK

Project Description

This project involves the rehabilitation of the following bridges:

Bridge No.	Feature Carried	Feature Crossed	Town
03311	I-84 WB	Rt. 72 WB, Rt. 372, Railroad and Quinnipiac River	Plainville - steel + deck
03312	I-84 EB	Rt. 72, Rt. 372, Railroad and Quinnipiac River	Plainville - steel + deck
03313	I-84 TR 815	I-84 EB, Rt. 72 WB, Rt. 372, Railroad and Quinnipiac River	New Britain - steel + deck
03320	I-84 TR 816	Rt. 372, Railroad and Quinnipiac River	New Britain - steel + deck + substructure
03322	I-84 Ramps 181 & 184	I-84 and I-84 Ramp 181	New Britain - substructure + steel + deck

Each bridge consists of a multi-span steel multi-girder superstructure composite with a reinforced concrete deck. Bridge Nos. 03311, 03312, 03313, and 03320 have substructures consisting of reinforced concrete abutments and piers with post tensioned hammerhead pier caps. Additionally, Bridge Nos. 03311, 03312, and 03313 each have an isolated pier bent with a steel girder cap with fixed hinge girder connections. Bridge No. 03322 has a substructure consisting of reinforced concrete abutments and piers.

The bridge geometry and 2013 Average Daily Traffic (ADT) are listed below.

Bridge No.	Curb-to-Curb Width	Out-to-Out Width	Number of Spans	Max Span Length	Total Structure Length	ADT
03311	51.9'	55.5'	6	109'	663'	37,400
03312	51'	55.5'	8	108'	853'	37,400
03313	27.8'	31.5'	9	109'	928'	17,815 (2010)
03320	26'	31.5'	3	112'	335'	4,432 (2014)
03322	22' in each direction (separated by 10' median)	59.5'	5	101'	430'	2.520 (2011)

These bridges are on the list program due to varying structural deficiencies. Bridge Nos. 03311, 03312, and 03313 are structurally deficient due to the poor condition of the steel girders. Bridge No. 03322 is structurally deficient due to the deteriorated condition of the substructure. The east abutment has started to lean towards I-84 below. Bridge No. 03320 has been added to the project due to its close proximity to the other bridges, and shows signs of similar deterioration to the steel girders and concrete deck.

The overall scope of rehabilitation for these bridges consists of full and partial depth patching of the deck, applying a new membrane waterproofing and bituminous overlay, repairing, cleaning and painting the

steel superstructure members as necessary, and patching the substructure as necessary. Superstructure rehabilitation consists of steel repairs by installing plates at locations noted in the inspection report and cleaning and painting the beam ends and bearing devices. The south fascia girder over I-84 EB of Bridge No. 03313 will be painted. The expansion bearings on Bridge No. 03322 at the abutments will be replaced with elastomeric bearings. The parapets on Bridge Nos. 03312, 03313, 03320 and 03322 will be modified in accordance with the latest parapet modification detail. The post tensioned pier caps for Bridge Nos. 03311, 03312, and 03313 will be temporarily supported in place and repaired. The substructures for Bridge Nos. 03320 and 03322 will repaired utilizing variable depth patch as required.

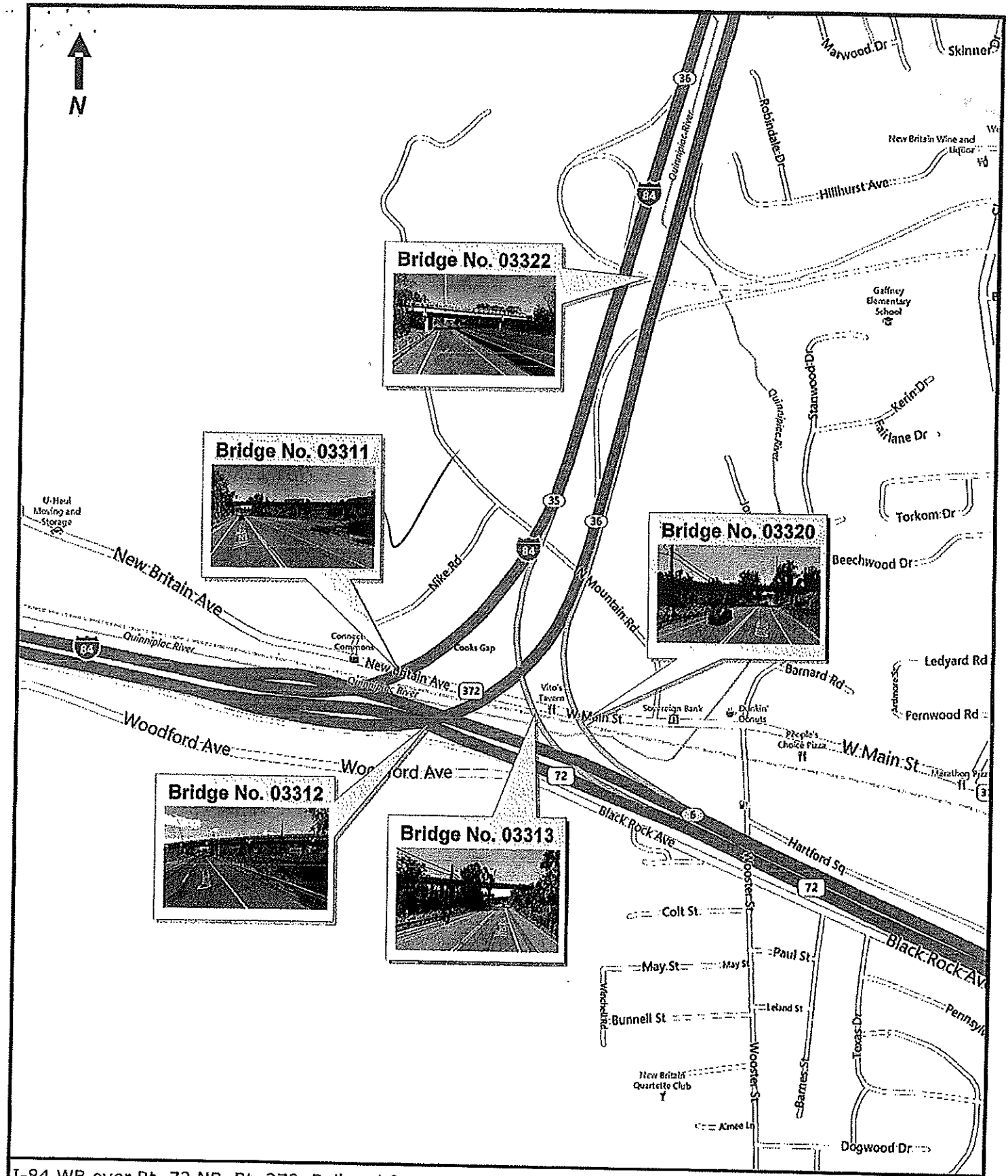
Construction on Bridge Nos. 03311 and 03312 will be performed utilizing temporary lane shifts and lane closures of I-84. During each stage, two lanes of I-84 traffic will be maintained on each bridge to perform full and partial depth deck patching, placing new membrane waterproofing and bituminous overlay and installing the new asphaltic plug expansion joints. Temporary precast concrete barrier curb (TPCBC) will be used to provide positive protection between the work area and travel lanes. Parapet modification to Bridge No. 03312 will be performed in conjunction with deck patching. Interruptions to Route 72 are anticipated for superstructure and substructure repairs. Traffic along Route 72 will have to be shifted to accommodate temporary supports of the pier caps and off-peak lane closures may be utilized to perform superstructure repairs. Route 372 may require lane shifts and possible lane closures to perform similar activities. Railroad coordination will be required for work in the vicinity of the rail.

Construction on Bridge Nos. 03313 and 03320 will be performed utilizing lane shifts of the ramp. A 12-foot travel lane will be provided during each stage of construction which consists of deck patching, membrane waterproofing and bituminous overlay installation, asphaltic plug expansion joint installation and parapet modifications. Traffic along Route 72 will have to be shifted to accommodate temporary supports of the pier caps and off-peak lane closures may be utilized to perform superstructure repairs. Route 372 may require lane shifts and possible lane closures to perform similar activities. Railroad coordination will be required for work in the vicinity of the rail.

Construction on Bridge No. 03322 will be performed utilizing lane shifts of the ramp. An 11-foot travel lane will be provided during each stage of construction which consists of deck patching, membrane waterproofing and bituminous overlay installation, asphaltic plug expansion joint installation and parapet modifications. Cleaning and painting of the beam ends and bearing devices, and most steel repairs and substructure repairs can be performed with no interruptions to I-84 traffic. Interruptions to I-84 Ramp 181 traffic under the bridge are anticipated to perform superstructure and substructure repairs to the western pier.

All utilities surrounding or attached to the bridges will be protected and maintained during construction. No right-of-way easements are anticipated. Construction is anticipated to begin in the spring of 2016 and should be completed in the fall of 2016.

No impacts to the wetlands surrounding Quinnipiac River are anticipated.



I-84 WB over Rt. 72 NB, Rt. 372, Railroad & Quinnipiac R.; I-84 EB over Rt. 72, Rt. 372, Railroad, & Q. River; I-84 TR-815 over I-84 EB, Rt. 72, Rt. 372, & Railroad; I-84 TR 816 over Rt. 372, Railroad, & Q. River; I-84 ramps 181 & 184 over I-84 and I-84 ramp 181

TOWNS:	BRIDGE NOS.
PLAINVILLE & NEW BRITAIN	03311, 03312, 03313, 03320, & 03322